

IN THE CLAIMS

Please amend claims 1, 2 and 8 as follows and cancel claim 19 without prejudice or disclaimer.

1. (Currently Amended) A method of making 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole, which method comprises the steps in sequence of: (i) reacting bromine with a solution of 4-acetamido-cyclohexanone in water to produce ~~2-bromo-4-acetamido-cyclohexanone~~ 2-bromo-4-acetamido-cyclohexanone; (ii) adding thiourea to produce ~~6-acetylamino-2-amino-4,5,6,7-tetrahydro-benzthiazole~~ 6-acetylamino-2-amino-4,5,6,7-tetrahydro-benzothiazole; (iii) adding an aqueous solution of hydrobromic acid to produce ~~2,6-diamino-4,5,6,7-tetrahydro-benzthiazole~~ 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole; and (iv) isolating ~~2,6-diamino-4,5,6,7-tetrahydro-benzthiazole~~ 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole.

2. (Currently Amended) A method according to claim 1, wherein step (iii) is carried out without isolating the ~~6-acetylamino-2-amino-4,5,6,7-tetrahydro-benzthiazole~~ 6-acetylamino-2-amino-4,5,6,7-tetrahydro-benzothiazole produced in step (ii).

3. (Previously submitted) A method according to claim 1, wherein any three successive steps of steps (i) to (iv) are carried out in a single reaction vessel.

4. (Previously submitted) A method according to claim 1, wherein steps (i) to (iv) are carried out in a single reaction vessel.

5. (Previously submitted) A method according to claim 1, further comprising, prior to step (i), the step of oxidizing 4-acetamido-cyclohexanol to produce 4-acetamido-cyclohexanone.

6. (Previously submitted) A method according to claim 5, wherein the step of oxidizing 4-acetamido-cyclohexanol to produce 4-acetamido-cyclohexanone and at least three successive steps of steps (i) to (iv) are carried out in a single reaction vessel.

7. (Previously submitted) A method according to claim 1, wherein in step (i) the solution of 4-acetamido-cyclohexanone in water and bromine are combined at a temperature of from 15°C to 40°C.

8. (Currently Amended) A method according to claim 1, wherein, after the bromine and the 4-acetamido-cyclohexanone solution have been combined, the mixture is heated to a temperature[[d]] of from 40°C to 50°C, and maintained at or near this temperature until the bromination is complete.

9. (Previously submitted) A method according to claim 1, wherein, in step (ii), the temperature is increased to 70°C to 90°C.

10. (Previously submitted) A method according to claim 1, wherein step (iii) is carried out under refluxing conditions.

11. (Previously submitted) A method according to claim 1, wherein, after step (iii) but before step (iv), the reaction mixture is cooled to 5°C to 20°C, then neutralized.

12. (Previously submitted) A method according to claim 1, further comprising the step of resolving the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole isolated in step (iv) into its R(+) and S(-) enantiomers and recovering the R(+) and/or S(-) enantiomer.

13. (Previously submitted) A method of synthesizing pramipexole, comprising the steps of: forming 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole by a method according to claim 1, and converting it to pramipexole.

14. (Previously submitted) A method according to claim 13, wherein 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole is converted to pramipexole by reaction with a propionyl halide.

15. (Previously submitted) A method according to claim 13, wherein the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole comprises the R(+) enantiomer.

16. (Previously submitted) A method according to claim 13, wherein the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole comprises the S(-) enantiomer.

17. (Previously submitted) A method according to claim 13, wherein the 2,6-diamino-4,5,6,7-tetrahydro-benzothiazole comprises a racemic mixture.

18. (Previously submitted) A method according to claim 14, further comprising the step of resolving the pramipexole into its R(+) and S(-) enantiomers and recovering the R(+) and/or S(-) enantiomer.

19. (Cancelled)